

# MLPC

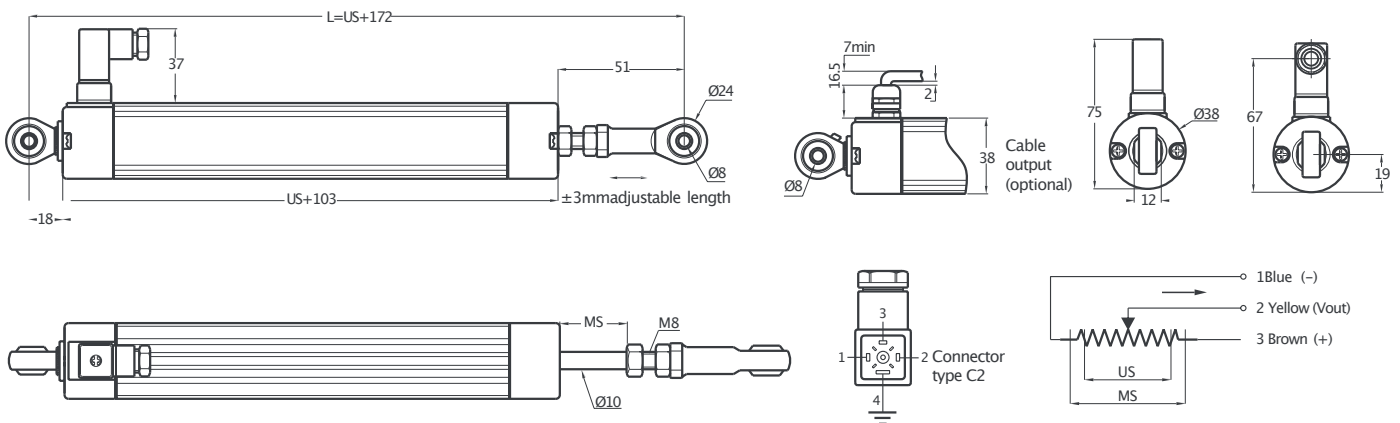
## Linear Potentiometer

- Measuring range 50 – 800mm
- $\pm 0.05\%$  linearity
- 100 million movements life
- $< 0.01\text{mm}$  repeatability
- Infinite resolution
- 5 kOhm : 50–600mm  
10 kOhm : 650–800mm



Technical Specifications	
Measurement stroke	50 – 800 mm
Linearity	$\pm 0.05\%$ (>200mm), $\pm 0.1\%$ (130–200mm) $\pm 0.2\%$ (75–129 mm), $\pm 0.5\%$ (<75 mm)
Repeatability	<0.01 mm
Resolution	Infinite
Resistance	5 kOhm : 50 – 600 mm 10 kOhm : 650 – 800 mm
Resistance tolerance	$\pm 20\%$
Load resistance	100 kOhm min.
Recommended wiper current	<1 $\mu\text{A}$
Permissible applied voltage	28 VDC max.
Electrical connections	4 pin connector (standard), cable (optional)
Displacement speed	<1,5 m/s
Vibration	EN 60068–2–6, 5–200 Hz 200 $\text{m/s}^2$ (20g), 2h 30 min. each axis (x,y,z)
Shock	EN 60068–2–2:2007 500 $\text{m/s}^2$ (50g), 11ms. (x,y,z axis)
Mechanical life	100 million movement
Case dimensions	$\varnothing 38\text{mm}$
Case material	Anodized aluminium
Rod material	Stainless steel
Rod diameter	$\varnothing 10\text{mm}$
Mechanical fixing	Ball joints on the both sides
Protection level	IP 65 – EN 60529
Operating temperature	$-20^\circ\text{C} \dots +80^\circ\text{C}$
Storage temperature	$-30^\circ\text{C} \dots +90^\circ\text{C}$

### Mechanical Specifications



MLPC (mm)	50	75	100	125	130	150	175	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	800
US (Usefull stroke)	50	75	100	125	130	150	175	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	800
MS (Mechanical stroke)	54	79	104	129	134	154	179	204	229	254	279	304	329	354	379	404	454	504	554	604	654	704	804
L (Total Length)	222	247	272	297	302	322	347	372	397	422	447	472	497	522	547	572	622	672	722	772	822	872	972

### Ordering Procedure

Model	Measurement stroke (mm)	Linearity (%)	Resistance (kOhm)	Connector /Cable
MLPC	500	D	5K	C2
MLPC	50 – 800 mm	A : $\pm 0.5\%$ (<75mm), B : $\pm 0.2\%$ (75–129mm), C : $\pm 0.1\%$ (130–200mm), D : $\pm 0.05\%$ (>200mm)	5K : 5 kOhm 10K : 10 kOhm	C2 : 4 pin connector 1M : 1 meter cable 2M5 : 2,5 meter cable